

AIRDEC-SF LT

AIRDEC-SF LT is a decorated thermoplastic sheet laminate that can be thermoformed into a variety of aircraft interior parts. AIRDEC-SF LT meets ¹FAA 60-second vertical flammability and smoke density requirements, and Boeing and Airbus toxic gas emission limits. AIRDEC-SF LT is typically used for passenger aircraft "thermoplastic" interior parts exempt from heat release rate requirements.

| | | | |
|-----------------------------|---|-------------|----------------|
| THICKNESS | AIRDEC-SF LT is available in nominal thicknesses from 0.025" to 0.160" to provide the optimum balance of part depth and stiffness. | | |
| COLOR | AIRDEC-SF LT is available in solid colored or printed sheets, and solid colored continuous material. Custom colors and patterns are available. | | |
| TEXTURE | AIRDEC-SF LT is available in a number of standard sheet textures, continuous Mesa-O and Mesa-C textures (see the Skyline Products texture chart), and custom textures may be available upon request. All textures exhibit good texture retention at lower forming temperatures, and AIRDEC -SF LT will accurately reproduce textured mold detail. | | |
| GLOSS | AIRDEC-SF LT is available in both high and medium gloss variations. | | |
| CLEANING | Because of its ² Kynar [®] surface, AIRDEC-SF LT possesses exceptional resistance to staining, ³ solvents, chemicals, and abrasion, and is very easy to clean with common cleaners. | | |
| QUALITY | Founded on years of experience, high quality materials, and a very controlled process, the color, texture, and integrity of this product is guaranteed. | | |
| PROPERTIES | AIRDEC-SF LT is a thermoplastic sheet laminate, which exhibits excellent part stiffness and impact resistance, and accurate reproduction of mold detail in conventional thermoforming operations at forming temperatures of 270°F to 350°F (132°C to 177°C). | | |
| TYPICAL APPLICATIONS | Seat Parts | Tray Tables | Lavatory Parts |
| FORMAT | AIRDEC-SF LT is available in sheets nominally 60 inches (1524 mm) wide, by 96 inches (2438 mm) long, or continuous rolls nominally 0.025 inches (0.76 mm) thick and 60 inches (1524 mm) wide. Other sizes are available upon request. | | |

¹ FAR 25.853 Paragraph (d) and FAR 25 Appendix F

² Kynar[®] is the registered trademark of ATOFINA Chemicals Inc.

³ The use of Ketone solvents is not recommended.

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| CHARACTERISTIC | TEST METHOD | UNIT | TYPICAL VALUES |
|--------------------------------------|--|---------------------------------------|---|
| THICKNESS | Micrometer before texturing | inch / mm | 0.025 / 0.64 ¹ 0.080 / 2.0 ² 0.120 / 3.0 ³ 0.160 / 4.1 ⁴ |
| WEIGHT | ASTM D 461 (11) | oz/yd ² / g/m ² | 22 / 746 ¹ 71 / 2407 ² 106 / 3593 ³ 141 / 4780 ⁴ |
| ADHESION OF LAYERS | DMS 2290 4.5.4 and 3.4.4 | Pass / Fail | Pass ^{1,2,3,4} |
| COLORFASTNESS TO LIGHT | DMS 2292 4.5.2 and 3.4.2 FTMS No. 191 Method 5660 | Pass / Fail | Pass (no change after 50 hours) ^{1,2,3,4} |
| TENSILE STRENGTH | ASTM D-638 | psi / MPa | 7700 / 53.1 ³ |
| FLEXURAL STRENGTH | ASTM D-790 | psi / MPa | 13000 / 89.6 ³ |
| FLEXURAL MODULUS | ASTM D-790 | psi / MPa | 343000 / 2365 ³ |
| IMPACT RESISTANCE | ASTM D-4812 | Izod Unnotched ft-lbs/inch | 14.0 ³ |
| HARDNESS | ASTM D-785 | Rockwell R | 113 ³ |
| HEAT DEFLECTION TEMPERATURE | ASTM D-648 | °F / °C at 264 psi | 201 / 94 ³ |
| FLAMMABILITY (60 Second Vertical) | FAR 25.853 (d)/ FAR 25 App. F Pt. IV Amdt. 83 Boeing D6-51377, ABD 0031 | Pass / Fail | Pass ^{1,2,3,4} |
| SMOKE DENSITY | FAR 25.853 (d)/ FAR 25 App. F Pt. V Amdt. 83 ASTM E-662, BSS 7238 Boeing D6-51377, ABD 0031 | Pass / Fail | Pass ^{1,2,3,4} |
| TOXIC GAS EMISSION | ABD 0031, Boeing D6-51377 | Pass / Fail | Pass ^{1,2,3,4} |
| DRYING TIME | Experiment | Hours | 1 hour at 250°F (121°C) per 0.040 inches (1 mm) of thickness |
| FORMING TEMPERATURE | Experiment | °F / °C | 270°F - 350°F / 132°C - 177°C |
| MOLD SHRINKAGE | Experiment | in / in mm / mm | 0.004 - 0.006 ³ 0.004 - 0.006 ³ |

¹ Tests performed on 0.025-inch thick material bonded to 0.125-inch thick fiberglass-phenolic-Nomex-honeycomb panel with HAA

² Tests performed on 0.080-inch thick material

³ Tests performed on 0.125-inch thick material

⁴ Tests performed on 0.160-inch thick material